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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,511	0/629,511 07/29/2003		John C. Jeppesen	6553-0501	6911
24936	7590	01/24/2006		EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/629,511	JEPPESEN, JOHN C.
Office Action Summary	Examiner	Art Unit
	Andrew M. Bunin	3743
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONE	l. lely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on      This action is FINAL. 2b)⊠ This      Since this application is in condition for allowant closed in accordance with the practice under E	action is non-final. ace except for formal matters, pro	
Disposition of Claims		
4)	7,22,37 and 38 is/are withdrawn fr	
Application Papers		
9) The specification is objected to by the Examiner 10) The drawing(s) filed on 29 July 2003 is/are: a) Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction  11) The oath or declaration is objected to by the Examiner	☑ accepted or b) ☐ objected to b drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa	

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### **DETAILED ACTION**

#### Election/Restrictions

Claims 1-3, 5, 6, 8-11, 13, 15-17, 22, 37, and 38 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/25/05.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldstein (US 6012455). Goldstein discloses a dual arch 24 oral appliance for obturating the oral cavity of the patient thereby preventing mouth venting of PAP. Goldstein disclose the oral appliance further having an anterior, extraoral slide 122 or 202/204 affixed thereto positioning the oral appliance within a patient's upper and lower dental arches capable of maintaining the patient's mandible in a substantially neutral centric position without protrusion of the mandible. Goldstein has also disclosed a pair of PAP tubing 118/120 and connecting one distal end of each tube to an external source of positive airway pressure (Figure 15). In addition, Goldstein discloses a PAP tubing retention platform 112/200 mounted to the slide 122 or 202/204. The PAP tubing

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118/120 is also operatively connected to the PAP tubing retention platform 112. Goldstein has taught inserting the other end of each tubing 118/120 into a respective nasal cavity for delivery of air from an external source as shown in Figure 15. The patients nares are sealed with the nasal pillows 124/126. Although Goldstein doesn't teach the method of forming these features, Goldstein has anticipated the structure implied by the steps. Therefore, a 35 USC 103 rejection may be made and the burden is shifted to the applicant to show an unobvious difference.

As for claim 19, Goldstein doesn't explicitly state the positioning of the PAP tubing retention platform 112 and the PAP tubing 118 anterioposteriorly to a position within a range of 5 mm to 30 mm from the labial surface of the maxillary anterior teeth. However, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the device of Goldstein for positioning of the PAP tubing retention platform 112 and the PAP tubing 118 anterioposteriorly to a position within a range of 5 mm to 30 mm from the labial surface of the maxillary anterior teeth for a variety of users with different measurements based on age and facial structures. It is noted that applicant's specification does not set forth this range as unexpectedly providing any new result or unexpectedly solving any new problem in the art over the prior art. Accordingly, the examiner considers the selection of such to be a mere obvious matter of design choice and as such does not patently distinguish the claims over the prior art, barring a convincing showing of evidence to the contrary.

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Claims 20, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldstein in view of Landis et al. (US 5477852). Goldstein discloses everything except the PAP tubing retention platform as being composed of an acrylic material that is at least 3 mm thick. However, Landis et al. disclose a similar Nasal PAP apparatus that is composed of an acrylic material (column 13, lines 61-66) that is at least 3 mm thick (column 12, line 39). Landis et al. has taught that it is well known in the art at the time of the invention to build PAP apparatus from acrylic and teaches the thickness used to be between 2 and 6 mm which anticipates a 3 mm thickness. In addition, it is noted that applicant's specification does not set forth acrylic as unexpectedly providing any new result or unexpectedly solving any new problem in the art over the prior art. Accordingly, the examiner considers the selection of such to be a mere obvious matter of design choice and as such does not patently distinguish this claim over the prior art, barring a convincing showing of evidence to the contrary.

As for claims 21 and 23, Landis et al. disclose the acrylic material as being adjusted to optimize a desired angulation via application of heat (column 12, lines 41-47) (column 4, lines 40-42). Landis et al. also disclose the PAP device as being created via injection molding (column 13, line 66). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify Goldstein with the 3 mm thick acrylic taught by Landis et al. PAP device for the PAP tubing retention platform in order for the device to maintain flexibility without breaking.

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Claims 25 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldstein in view of Singer et al. (US 5823193). Goldstein has taught everything except an obturator comprising an exterior surface made from acrylic material lined with an elastomeric material. However, Singer et al. disclose a similar obturator for alleviating snoring. Singer et al. disclose the obturator 10 comprising an exterior surface 32/34 made from an acrylic material lined with an elastomeric material 28/30 (column 4, lines 20-29) (abstract). Singer et al. continue to disclose a hard exterior acrylic 32/34 and deposited with an elastomeric material 28/30. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the device of Goldstein with exterior acrylic material for protecting the teeth against grinding and an inner elastomeric material for conforming to the teeth and cushioning the jaw against impact forces.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldstein in view of Landis et al. Goldstein discloses the anterior extraoral slide 142 is bonded to the anterior surface of the oral appliance 130 without the use of metal parts as shown in Figure 18. However, Goldstein doesn't teach the slide acrylically bonded to the oral appliance. It is noted that applicant's specification does not set forth acrylic bond as unexpectedly providing any new result or unexpectedly solving any new problem in the art over the prior art. Accordingly, the examiner considers the selection of such to be a mere obvious matter of design choice and as such does not patently distinguish this claim over the prior art, barring a convincing showing of evidence to the

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contrary. Landis et al. disclose a similar Nasal PAP apparatus that is composed of an acrylic material (column 13, lines 61-66). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify Goldstein with the acrylic bond for maintaining a strong connection between the slide and an oral appliance.

Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldstein in view of Katz et al. (US 2004/0115139). Goldstein discloses everything except the oral appliance as being fabricated from a three-dimensional bite registration for orienting the position of the upper and lower dental arches. However, Katz et al. has taught the aspect of fabricating an oral appliance such as a denture from a three-dimensional bite registration for orienting the position of the upper and lower dental arches (paragraphs 142-146). In addition, Katz et al. has also taught the bite registration as being produced utilizing Transcutaneous Electrical Nerve Stimulation (TENS) (paragraph 146, lines 6). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the device of Goldstein so its made from a three-dimensional bite registration via TENS as taught by Katz et al. in order to achieve optimal dental function, stability, and harmony of the stomatognathic system.

Claims 33-35 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldstein. Goldstein discloses a dual arch oral appliance 92 for placement

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substantially within the oral cavity of a patient (Figure 15). Goldstein continues to disclose a retention platform 94 operably connected to the oral appliance 92 for positioning aneriorially of the patient's mouth (Figure 15). Goldstein also discloses a pair of air supply tubes 100/102 retained by the retention platform 94. Through the drawings, Goldstein teaches the dual arch oral appliance 92 within a patient's oral cavity and engagement of one arch of the oral appliance to the patient's mandibular arch and the other arch of the oral appliance to the patient's maxillary arch by the patient closing the oral cavity (see Figures 1,4,9, 11, 14, 19, and 20). Goldstein's device is capable of engagement without protrusion of the mandible and locating a neutral centric position with respect to the maxillary arch. Goldstein has continued to disclose positioning the end of each tube 100/102 within a respective nostril, connecting the distal ends of each tube to an air supply source, and delivering an air flow to the patient from the air supply source through the pair of tubes as shown in Figure 14. The device of Goldstein is capable meeting the steps of supporting and stabilizing tubes connected to the dual arch (Figure 15). Although Goldstein doesn't teach the method of forming these features, Goldstein has anticipated the structure implied by the steps. Therefore, a 35 USC 103 rejection may be made and the burden is shifted to the applicant to show an unobvious difference.

As for claims 35 and 39, Goldstein discloses connecting the tubes 100/102to the PAP tubing retention platform 94 and sealing both patient's nares with each nare being sealed using the nasal pillow 106/108 operably connected to a portion of the respective tubing positioned within a nostril (Figure 15). However, Goldstein doesn't teach the

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steps of selecting a PAP tubing retention platform 94 appropriately sized for the patient's nasal features and/or width. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to select a PAP tubing retention platform sized for a patient's nasal features or width since it was known in the art that such apparatus are manufactured to fit a variety of users with different measurements based on age and facial structures.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldstein in view of Katz et al. Goldstein discloses everything except the step of obtaining a three-dimensional bite registration in a neutral centric position via Transcutaneous Electrical Nerve Stimulation (TENS). However, Katz et al. has taught obtaining a three-dimensional bite registration in a neutral centric position via Transcutaneous Electrical Nerve Stimulation (TENS) (paragraphs 142-146) (especially paragraph 146, lines 6). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the device of Goldstein so its made from a three-dimensional bite registration via TENS as taught by Katz et al. in order to achieve optimal dental function, stability, and harmony of the stomatognathic system.

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## Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 4472140, US 4782837, US 4676257, US 5752510, US 6209542, US 5365945, US 5117816, and US 6571798

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew M. Bunin whose telephone number is (571)272-4801. The examiner can normally be reached on Monday - Friday, 8 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on (571)272-4791. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Ju*nus/ AMB 1/9/06

Suporvisor Waters Examiner

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